

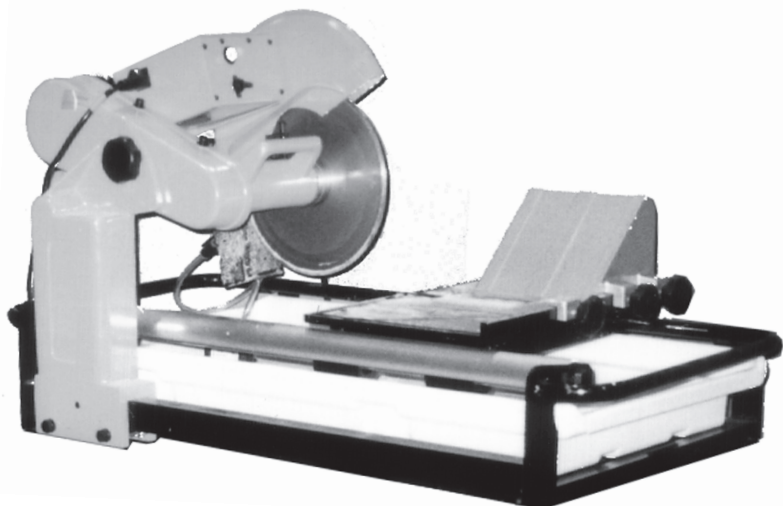
CHICAGO

Electric Power Tools

***10" TILE SAW,
2.5 HP WITH PVC TRAY***

Model 46225

ASSEMBLY AND OPERATING INSTRUCTIONS



3491 Mission Oaks Blvd., Camarillo, CA 93011

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For technical questions and replacement parts, please call 1-800-444-3353.

Specifications

ITEM	DESCRIPTION
Overall Dimensions	39-3/4"L x 21"W x 48-3/4"H
Table Dimensions	16-3/8" x 11-1/8"
Water Tray Dimensions	35-1/4" x 18-1/2" x 3"D (outside)
Cut Capacity	Rips, 18"; Diag., 12"; Depth, 3-3/4"
Blade Specs. (Blade not included)	10" Continuous Rim Blade (not included), 0.050" Thick, Metal Bonded Diamonds
Motor Specs.	3340 RPM, 2-1/2 HP, 115 V/120V, 60 HZ, 15 Amps, 1800 Watts, Single Phase
Construction	Low Carbon Steel and Cast Aluminum
Cord Specs.	3-Prong Plug, Double Insulated, 6'L, 14 AWG, UL Approved
Pump Max. Flow	10-12 liters per minute
Net Weight	107 Lbs.



Save This Manual

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

Safety Warnings and Precautions

WARNING: When using tool, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instructions before using this tool!

1. **Keep work area clean.** Cluttered areas invite injuries.
2. **Observe work area conditions.** Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well lighted. Do not use electrically powered tools in the presence of flammable gases or liquids.
3. **Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools, or extension cords.
4. **Store idle equipment.** When not in use, tools must be stored in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
5. **Do not force tool.** It will do the job better and more safely at the rate for which it was intended. Do not use inappropriate attachments in an attempt to exceed the tool capacity.

6. **Use the right tool for the job.** Do not attempt to force a small tool or attachment to do the work of a larger industrial tool. There are certain applications for which this tool was designed. Do not modify this tool and do not use this tool for a purpose for which it was not intended.
7. **Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically nonconductive clothes and nonskid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
8. **Use eye and ear protection.** Always wear ANSI approved impact safety goggles.
9. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines.
10. **Maintain tools with care.** Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and, if damaged, have them repaired by an authorized technician. The handles must be kept clean, dry, and free from oil and grease at all times.
11. **Disconnect power.** Unplug tool when not in use.
12. **Remove adjusting keys and wrenches.** Check that keys and adjusting wrenches are removed from the tool or machine work surface before plugging it in.
13. **Avoid unintentional starting.** Be sure the switch is in the Off position when not in use and before plugging in.
14. **Stay alert.** Watch what you are doing, use common sense. Do not operate any tool when you are tired.
15. **Check for damaged parts.** Before using any tool, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if any switch does not turn On and Off properly.
16. **Guard against electric shock.** Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerator enclosures.
17. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this tool. Approved accessories are available from Harbor Freight Tools.

18. **Do not operate tool if under the influence of alcohol or drugs.** Read warning labels on prescriptions to determine if your judgment or reflexes are impaired while taking drugs. If there is any doubt, do not operate the tool.
19. **Use proper size and type extension cord.** If an extension cord is required, it must be of the proper size and type to supply the correct current to the tool without heating up. Otherwise, the extension cord could melt and catch fire, or cause electrical damage to the tool. If you are using the tool outdoors, use an extension cord rated for outdoor use (signified by "WA" on the jacket).
20. **Maintenance.** For your safety, service and maintenance should be performed regularly by a qualified technician.

Note: Performance of this tool (if powered by line voltage) may vary depending on variations in local line voltage. Extension cord usage may also affect tool performance.

Warning: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Grounding/Voltage Warning

Warning: Before using this tool, make sure that the power cord will be plugged into an outlet which has a three-prong ground, is 120V AC, is protected by a 30 Amp circuit breaker and has a Ground Fault Interrupter.

Common household current is 110-120V. As long as the outlet used with the Tile Saw is rated from 110-120V there will be no complications using it with household receptacles. Plug the tool into a 110-120V properly grounded outlet protected by a 15-Amp, dual element time delay or circuit breaker.

NEVER try to plug a 110-120V tool into a 220-240V circuit, or serious complications and possible injury to the operator may occur. The plugs have different shapes to prevent this.

This tool has a three-prong plug. The third round prong is the ground. Cutting off the ground will result in a safety hazard and void the warranty.

If the outlet you are planning to use is the two-prong type, do not remove or alter the grounding prong in any way. Use an adaptor and always connect the grounding lug to a known grounding source. It is recommended that you have a qualified electrician replace the two-prong outlet with a properly grounded three-prong outlet.

RECOMMENDED MINIMUM WIRE GAUGE FOR EXTENSION CORDS* (120 VOLT)					
NAMEPLATE AMPERES (At Full Load)	EXTENSION CORD LENGTH				
	25 Feet	50 Feet	75 Feet	100 Feet	150 Feet
0 – 2.0	18	18	18	18	16
2.1 – 3.4	18	18	18	16	14
3.5 – 5.0	18	18	16	14	12
5.1 – 7.0	18	16	14	12	12
7.1 – 12.0	18	14	12	10	-
12.1 – 16.0	14	12	10	-	-
16.1 – 20.0	12	10	-	-	-

* Based on limiting the line voltage drop to five volts at 150% of the rated amperes.

Extension Cords

Your tool has a three-prong plug, therefore you must use a three-prong extension cord. Only use rounded jacket extension cords listed by the UL. Improper use of extension cords may cause inefficient operation of your tool which can result in overheating. Be sure your extension cord is rated to allow sufficient current flow to the Motor. If you are using the tool outdoors, use an extension cord rated for outdoor use (signified by “WA” on the jacket).

Unpacking

When unpacking, check to make all parts listed on Pages 10-11 are included. If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual.

Note: Table Stand SKU #46310 is specifically designed for use with this 10” Tile Saw and is not included. Stand is available for purchase from Harbor Freight Tools. See Fig. 1 on Page 9 for a view of the Table Saw and Stand assembly.

If the Stand is not to be used with the Tile Saw, the Saw must be securely mounted onto a flat, level surface capable of supporting the weight of the Tile Saw in addition to the weight of all work pieces.

Assembly

1. Slide the Water Tank [1] through the slots in the Machine Frame [6] so that the entire Tank rests inside the Machine Frame.
2. Mount the Motor [19] to the Machine Frame by connecting the Supporting Frame [12] to the Machine Frame at the point shown in the Assembly Diagram on Page 12. Secure using two Bolts [7], Elastic Washers [8] and Big Flat Washers [9] as shown.
3. Next, attach the Blade Guard [20] to the Motor using the Locking Knob [23] and Flat Washer [24] provided. Please note: this product does not include a Blade. Please see the following section, “Changing/Installing the Blade,” for instructions on how to properly install a new Blade.

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4. Plug the Pump [59] into the back of the Motor and attach the Pump to the Water Tank using the four suction feet on the bottom of the Pump. See Fig. 2 on Page 11.
5. Slide the Table Holder [51] through the middle of the Rail Cover [47] and fit the two Inserts [45] over the ends of the Cover to prevent the Table Holder from slipping out.
6. Attach the Rail and Table [52] Assembly you created in Step 5 to the Frame using two sets of the Bolts [3], Flat Washers [4] and Teeth Washers [5] as shown in the Assembly Diagram.
7. Before operating this tool, mount the Table Saw to the Table Stand (SKU #46310, sold separately) by following the steps outlined in the Assembly and Operating Instructions for the Table Stand. If the Stand is not to be used with the Tile Saw, the Saw must be securely mounted onto a flat, level surface capable of supporting the weight of the Tile Saw in addition to the weight of all work pieces.

Changing/Installing the Blade

1. Be sure the Power Cord is unplugged from its power source.
2. Loosen the Locking Knob located on the side of the Blade Guard [20] and raise Guard. Tighten the Knob to lock the Guard in an “up” position.
3. Depress the Brake Shaft Button [26] (See Fig. 1 on Page 10) while turning the Blade (or Spindle [44] if you have not yet installed a Blade) with your hand until the Shaft button depresses fully. This will prevent the Spindle from spinning and allow you to unscrew the Nut [29] and Outer Flange [30].
4. Slide the new Blade over the Spindle, and refasten the Outer Flange and Nut. Be sure to tighten the Nut fully before use.
5. Lower the Blade Guard and tighten the Locking Knob.

Installing the Water Supply

To prevent excessive wear on the Blade, be sure to maintain a continuous flow of water over the Blade while cutting. Never cut anything if the water flow is not continuous.

1. Attach the Pump as described in Step 4, “Assembly.” Position the Pump so it will not interfere with the motion of the Table while cutting.
2. Fill the Water Tank with enough water so that the Pump is completely submerged, but not so much water that the Tank overflows.

Note: When using the Tile Saw, extreme care must be taken to insure that the Saw’s Power Cord is positioned to remain dry and free from water at all times. Severe personal injury or death can occur if the Power Cord or the operator of this tool should become wet at any time while this tool is in use. Care and common sense must be used in planning a safe work area.

Operation

Preparing to Cut:

1. Mark the tile you wish to cut and place it aside for a moment.
2. Fill the Tank with water as described in “Installing the Water Supply,” above.
3. Plug the Pump’s Power Cord into the Power Unit. Make sure the Pump Power Cord is positioned so it will remain in a dry location once the machine is in use.
If an extension cord is used, make sure it is of appropriate size and length -see *Recommended Minimum Wire Gauge for Extension Cords* page 5.
4. When it is safe to do so, plug the Power Unit Cord into an appropriate outlet.
5. Put on your ANSI-approved eye protection.
6. Flip the Power Switch located on the front of the Motor (see Fig. 2 on Page 11) to the “on” position.
7. Before operating the Tile Saw, let the Motor run for approximately one minute. Make sure the Blade is rotating at full speed and there are no unusual noises. If you feel the unit is not operating properly, do not use this tool.
8. **To keep the pump working properly, the water in the tub may need to be changed in the middle of a long project.** Never allow the water to become muddy or full of silt. When changing the water, always rinse out the intake of the pump in clean water to help prevent silt buildup.
9. When finished, flip the power switch to the “off” position, unplug the unit, dispose of the dirty water in an appropriate manner, rinse the pump’s inlet, and clean any silt out of the bottom of the tank.

Cutting Tile:

1. Place your marked tile on the Table and brace it against the upturned edge (Fence) on the back of the Table. Align the cut mark with the Blade.
2. Once the Tile Saw has been turned on, allow the Blade to spin up to full speed. Watch to be sure that the Pump is supplying a continuous flow of water to the Blade.
3. Keeping your hands clear of the Blade, move the Table and the tile underneath the Blade. Feed the tile underneath the Blade very slowly. Do not force it. If the rotational speed of the Blade slows down significantly, then you are forcing the tile. No spectators should be allowed in the working area.
4. While cutting, watch to be sure that the Blade remains wet. If it runs dry, check the action of the Pump and the Water level of the Tub.

5. If the Motor stops suddenly, flip the Power Switch to the “off” position. Wait approximately 15 minutes, remove the Circuit Breaker Cap located directly above the Power Switch, and push the Reset Button.

Using the Parallel Guide:

If you have to cut a number of tiles to the same dimension, using the Parallel Guide may save you a significant amount of time.

1. Mark the first tile to the correct dimensions, allowing space for grout.
2. With the Motor turned off, place the marked tile on the Table against the Fence. Align the cut mark with the Blade.
3. Loosen the Locking Knob [23] on the Parallel Guide [57]. Place the hooked portion of the Guide over the upturned edge of the Table, on the side of the cutting groove where you have placed the part of the marked tile that you intend to keep and use after cutting. The Parallel Guide will be parallel to the tile, and perpendicular to the Fence.
4. Slide the Parallel Guide along the Fence until it abuts the tile, keeping sure that the mark on your tile remains in line with the Blade.
5. Tighten the Locking Knob on the Parallel Guide.
6. When you are satisfied that the tile is aligned with the Blade, and the Guide is in place, and it is safe to do so, turn on the Power Switch. Cut the tile as described in previous instructions.
7. Check to be sure that the tile has been cut to the proper dimensions before using the Parallel Guide to cut your other tiles. Periodically test the fit of each tile as you continue cutting, to be sure the Parallel Guide has not moved.

Using the Angle Guide:

Use the Angle Guide for cutting angled edges on your tiles.

1. Attach the Angle Guide [58] to the Fence as you did the Parallel Guide, using the two Locking Knobs [23] to hold the Guide in place.
2. Use the Cutting Groove in the middle of the Table to brace the edge of your tile as you slide the tile and the Table underneath the Blade.

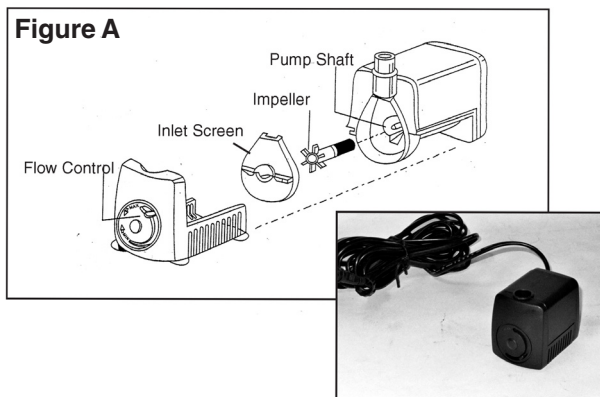
Maintenance

Always unplug the Power Cord before servicing and before performing any maintenance.

General Maintenance:

1. Regularly inspect the Diamond Saw Blade. Using a dull Blade will cause excessive wear on the Motor, and will not produce a satisfactory cut. Replace with a new one when needed.

2. Inspect the Mounting Screws on all safety covers, and the Arbor Nut on the Cutting Wheel Shaft. Tighten any that appear loose.
3. Protect the Motor and electrical components from prolonged or excessive exposure to water or wet conditions. Wipe the unit dry as needed.
4. Periodically apply a light lubricant to the Rail Cover.
5. Note: The Pump is non-serviceable. If it should fail, first try clearing the intake of debris and be sure the hole is not plugged.
6. To clean the Pump Filter, remove the front cover and impeller. See Figure A.
7. Use a small brush or stream of water to remove any debris.
8. If the Pump is used on a dirty surface, raise it slightly to reduce the amount of debris entering the intake.
9. Adjust the Flow Control on the end of the Pump to restrict flow.
10. Do not let the Pump run when it is not submerged in water. Running the Pump out of the water will damage the Pump.
11. If the Pump still does not work, it must be replaced. Replacement Pumps are available through Harbor Freight Tools.



PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

Parts List

<i>Item</i>	<i>Description</i>	<i>QTY</i>	<i>Item</i>	<i>Description</i>	<i>QTY</i>
1	Water tank	1	20a	Brass tube	2
2	Plastic block	1	21	Water baffle	1
3	Bolt	2	21a	Screw	1
4	Flat washer	2	22	Water Connector	1
5	Teeth washer	2	23	Locking knob	4
6	Machine frame	1	24	Flat washer	6
7	Bolt	2	25	Brake holder	1
8	Elastic washer	2	26	Brake shaft	1
9	Big flat washer	2	27	E-ring	1
10	Screw	1	28	Spring	1
11	Locking knob	1	29	Nut	1
12	Supporting frame	1	30	Outer flange	1
13	Shaft	1	31	Blade (shipment w/o blade)	1
14	Tension adjust plate	1	32	Inner flange	1
15	Flat washer	1	33	Rubber block	1
16	Bolt	1	34	Machine bed	1
17	Motor wheel	1	35	Bolt	4
18	Screw	5	36	Wheel cover	1
19	Motor	1	37	Screw	3
20	Blade guard	1	38	Belt	1
			39	Screw	3

Fig. 1



Tile Saw with Table Stand,
SKU #46310, available for purchase
from Harbor Freight Tool Company.

Parts List, Cont.

Item	Description	QTY
40	<i>Pully cover</i>	1
41	<i>Driven pulley</i>	1
42	<i>Key</i>	2
43	<i>Bearing</i>	2
44	<i>Spindle</i>	1
45	<i>Insert</i>	2
46	<i>Rail</i>	1
47	<i>Rail cover</i>	1
48	<i>Insert</i>	2
49	<i>Bolt</i>	2
50	<i>Elastic washer</i>	2
51	<i>Table holder</i>	1
52	<i>Table</i>	1
53	<i>Nut</i>	5
54	<i>Wheel</i>	1
55	<i>Flat washer</i>	6
56	<i>Bolt</i>	1
57	<i>Parallel guide</i>	1
58	<i>Angle guide</i>	1
59	<i>Pump</i>	1

Circuit Breaker Cap
Power Switch
Brake Shaft Button
Angle Guide

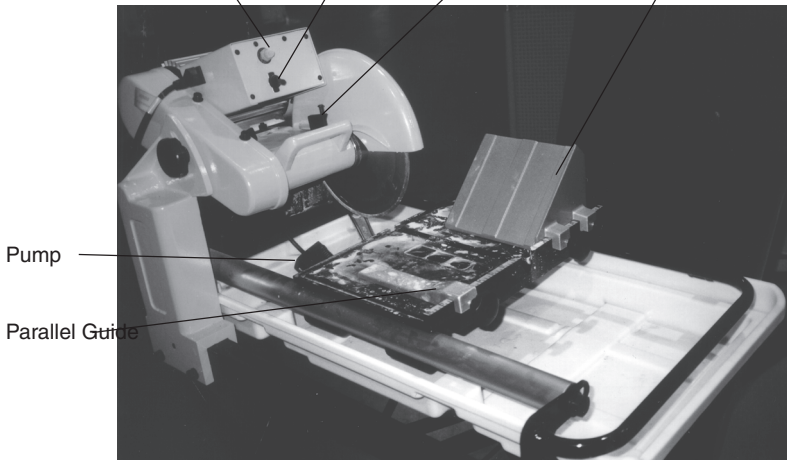
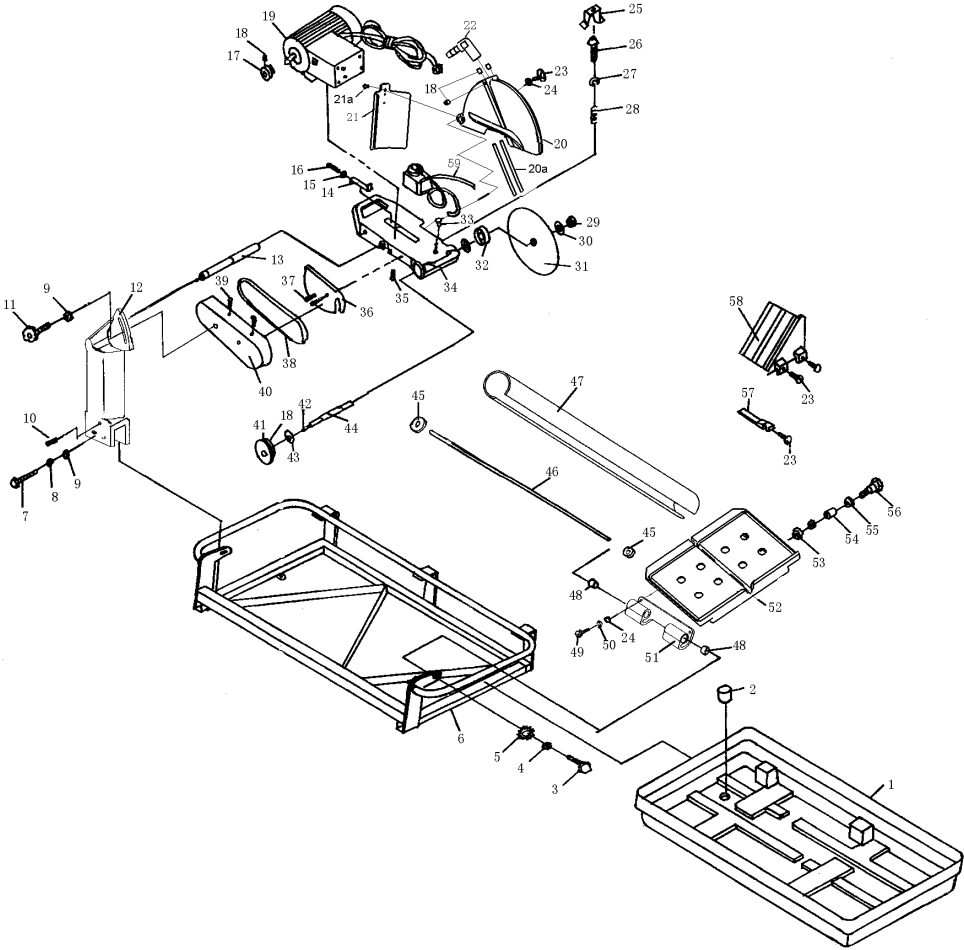


Fig. 2

Assembly Drawing



NOTE: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.